

REMARKS

The Examiner is thanked for the thorough examination of the present application. The Final Office Action mailed May 23, 2006 and subsequent Advisory Action mailed August 7, 2006 tentatively rejected claims 1-20. The results of a Pre-Appeal Brief Conference were mailed October 26, 2006. This submission is filed within the one-month time period from the mailing of the decision. Upon entry of the amendments in this response, claims 1-20 are pending. More specifically, claims 1, 7, 14, 15, and 16 are amended. These amendments are specifically described hereinafter.

I. Present Status of Patent Application

Claims 1-5, 7-9, and 14-17 are rejected under 35 U.S.C. 102(e) as allegedly being anticipated by *Unger, et al* (U.S. Publication No. 2003/0026453). Claims 6, 10-13, and 18-20 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Unger, et al* (U.S. Publication No. 2003/0026423) in view of *Faulkner, et al* (U.S. Patent No. 5,144,669). These rejections are respectfully traversed.

II. Rejections Under 35 U.S.C. §102(e)**A. Claims 1-5**

The Office Action rejects claims 1-5 under 35 U.S.C. §102(e) as allegedly being anticipated by *Unger, et al* (U.S. Publication No. 2003/0026453). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 1, as amended, recites:

1. A method for providing an encrypted transport stream, the method comprising the steps of:

receiving a clear stream, the clear stream including a plurality of programs, each program comprising a plurality of packets each having a packet identifier

(PID), wherein at least one of the plurality of packets is designated a critical packet;

scrambling the clear stream according to a first encryption method to provide a first encryption stream;

scrambling the clear stream according to a second encryption method to provide a second encryption stream;

aligning in time the clear stream, the first encryption stream, and the second encryption stream;

after scrambling the clear stream according to the first encryption method to provide the first encryption stream and after the scrambling the clear stream according to the second encryption method to provide the second encryption stream, passing packets of the clear stream through a multiplexer, wherein when the at least one critical packet is identified in the packets of the clear stream, the critical packet of the clear stream drops and the scrambled critical packets included in the first and second encryption streams pass; and

multiplexing the packets of the clear stream and the critical packets of the first and second encryption streams to provide a partial dual encrypted stream.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 7 U.S.P.Q.2d 1129 (Fed. Cir. 1988).

Applicant respectfully submits that independent claim 1 is allowable for at least the reason that *Unger* does not disclose, teach, or suggest at least **after scrambling the clear stream according to the first encryption method to provide the first encryption stream and after the scrambling the clear steam according to the second encryption method to provide the second encryption stream, passing packets of the clear stream through a multiplexer, wherein when the at least one critical packet is identified in the packets of the clear stream, the critical packet of the clear stream drops and the scrambled critical packets included in**

the first and second encryption streams pass. Even if, *arguendo*, *Unger* discloses a select-then-encrypt system, it fails to disclose an encrypt-then-select system as claimed. In *Unger*, a select-then-encrypt system, when a critical packet is sensed in a clear stream, only the critical packets are encrypted and then multiplexed. However, according to the claim presented above, an encrypt-then-select system, without regard to critical packets, the clear stream is encrypted according to a first encryption method and encrypted according to a second method. Then, when the critical packet in the clear stream is sensed, the already-encrypted packets corresponding to the critical packet are selected for the multiplexer. Therefore, *Unger* does not anticipate independent claim 1, and the rejection should be withdrawn.

Because independent claim 1 is allowable over the cited references of record, dependent claims 2-5 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that dependent claims 2-5 contain all the steps/features of independent claim 1. *See Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002) *Jeneric/Pentron, Inc. v. Dillon Co.*, 205 F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000); *Wahpeton Canvas Co. v. Frontier Inc.*, 870 F.2d 1546, 10 U.S.P.Q.2d 1201 (Fed. Cir. 1989). Therefore, since dependent claims 2-5 are patentable over *Unger*, the rejection to claims 2-5 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 1, dependent claims 2-5 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claims 2-5 are allowable.

B. Claims 7-9

The Office Action rejects claims 7-9 under 35 U.S.C. §102(e) as allegedly being anticipated by *Unger, et al* (U.S. Publication No. 2003/0026453). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 7, as amended, recites:

7. A partial dual-encryption device for encrypting a clear stream, comprising:
a port for providing a first encrypted stream corresponding to the clear stream
from a first scrambler;
a port for providing a second encrypted stream corresponding to the clear stream
from a second scrambler;
an aligner, identifier, and remapper (AIR) device coupled to each scrambler for
providing a partial dual-encrypted stream,
wherein the clear stream having at least one critical packet is provided to
each scrambler and the AIR device, *wherein, after the streams are
encrypted, the AIR device aligns packets of the clear stream, the
first encrypted stream, and the second encrypted stream, and
wherein, upon identification of the at least one critical packet of
the clear stream, provides the partial dual-encrypted stream
including non-critical packets of the clear stream, a critical
packet of the first encrypted stream, and a remapped critical
packet of the second encrypted stream.*

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 7 is allowable for at least the reason that *Unger* does not disclose, teach, or suggest at least **wherein, after the streams are encrypted, the AIR device aligns packets of the clear stream, the first encrypted stream, and the second encrypted stream, and wherein, upon identification of the at least one critical packet of the clear stream, provides the partial dual-encrypted stream including non-critical packets of the clear stream, a critical packet of the first encrypted stream, and a remapped critical packet of the second encrypted stream**. Even if, arguendo, *Unger* discloses a select-then-encrypt system, it fails to disclose an encrypt-then-select system as claimed. In *Unger*, a select-then-encrypt system, when a critical packet is sensed in a clear

stream, only the critical packets are encrypted and then multiplexed. However, according to the claim presented above, an encrypt-then-select system, without regard to critical packets, the clear stream is encrypted according to a first encryption method and encrypted according to a second method. Then, when the critical packet in the clear stream is sensed, the already-encrypted packets corresponding to the critical packet are selected for the multiplexer. Therefore, *Unger* does not anticipate independent claim 7, and the rejection should be withdrawn.

Because independent claim 7 is allowable over the cited references of record, dependent claims 8-9 (which depend from independent claim 7) are allowable as a matter of law for at least the reason that dependent claims 8-9 contain all the steps/features of independent claim 7. Therefore, since dependent claims 8-9 are patentable over *Unger*, the rejection to claims 8-9 should be withdrawn and the claims allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 7, dependent claims 8-9 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claims 8-9 are allowable.

C. Claims 14-15

The Office Action rejects claims 14-15 under 35 U.S.C. §102(e) as allegedly being anticipated by *Unger, et al* (U.S. Publication No. 2003/0026453). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 14, as amended, recites:

14. A method for transmitting an encrypted transport stream, the method comprising the steps of:

receiving a clear stream, the clear stream including a plurality of programs, each program comprising a plurality of packets each having a packet identifier (PID), wherein at least one of the plurality of packets is designated a critical packet;

scrambling with a first scrambler the clear stream according to a first encryption method to provide a first encrypted stream;

aligning in time the clear stream and the first encrypted stream;
after providing the first encryption stream, identifying the at least one critical packet associated with the clear stream, wherein prior to identification, packets associated with the clear stream pass to a multiplexer and encrypted packets associated with the first encrypted stream drop, and wherein subsequent to identification, packets associated with the clear stream pass to a second scrambler and encrypted packets associated with the first encrypted stream pass to the multiplexer, wherein the second scrambler provides a second encrypted stream to the multiplexer; and multiplexing non-critical packets associated with the clear stream and the encrypted critical packets associated with the first and second encrypted streams to provide a partial dual-encrypted stream.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 14 is allowable for at least the reason that *Unger* does not disclose, teach, or suggest at least **after providing the first encryption stream, identifying the at least one critical packet associated with the clear stream, wherein prior to identification, packets associated with the clear stream pass to a multiplexer and encrypted packets associated with the first encrypted stream drop, and wherein subsequent to identification, packets associated with the clear stream pass to a second scrambler and encrypted packets associated with the first encrypted stream pass to the multiplexer, wherein the second scrambler provides a second encrypted stream to the multiplexer**. Even if, arguendo, *Unger* discloses a select-then-encrypt system, it fails to disclose an encrypt-then-select system as claimed. In *Unger*, a select-then-encrypt system, when a critical packet is sensed in a clear stream, only the critical packets are encrypted and then multiplexed. However, according to the claim presented above, an encrypt-then-select system, without regard to critical packets, the clear stream is encrypted according to a first encryption method and encrypted according to a second method. Then, when the critical packet in the clear

stream is sensed, the already-encrypted packets corresponding to the critical packet are selected for the multiplexer. Therefore, *Unger* does not anticipate independent claim 14, and the rejection should be withdrawn.

Because independent claim 14 is allowable over the cited references of record, dependent claim 15 (which depends from independent claim 14) is allowable as a matter of law for at least the reason that dependent claim 15 contains all the steps/features of independent claim 14. Therefore, since dependent claim 15 is patentable over *Unger*, the rejection to claim 15 should be withdrawn and the claim allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 14, dependent claim 15 recites further features and/or combinations of features, as are apparent by examination of the claim itself, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claim 15 is allowable.

D. Claims 16-17

The Office Action rejects claims 16-17 under 35 U.S.C. §102(e) as allegedly being anticipated by *Unger, et al* (U.S. Publication No. 2003/0026453). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 16, as amended, recites:

16. A partial dual-encryption device, comprising:
a port for providing a first encrypted stream from a first scrambler;
an aligner, identifier, and remapper (AIR) device coupled to the scrambler
for providing a partial dual-encrypted stream,
wherein a clear stream having at least one critical packet is provided to
the scrambler and the AIR device, wherein the AIR device aligns
packets of the clear stream and the first encrypted stream, and
identifies the at least one critical packet associated with the clear stream, wherein, upon identification of the at least one critical packet, provides the first stream having been previously encrypted, provides the at least one critical packet to a second

scrambler, the second scrambler to provide a second encrypted stream, and wherein the AIR device provides the partial dual-encrypted stream including non-critical packets associated with the clear stream and dually-encrypted critical packets associated with the first and second encrypted streams.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §102, the cited reference must disclose, teach, or suggest all elements/features/steps of the claim at issue.

Applicant respectfully submits that independent claim 16 is allowable for at least the reason that *Unger* does not disclose, teach, or suggest at least the feature that **identifies the at least one critical packet associated with the clear stream, wherein, upon identification of the at least one critical packet, provides the first stream having been previously encrypted, provides the at least one critical packet to a second scrambler, the second scrambler to provide a second encrypted stream, and wherein the AIR device provides the partial dual-encrypted stream including non-critical packets associated with the clear stream and dually-encrypted critical packets associated with the first and second encrypted streams.**

Even if, arguendo, *Unger* discloses a select-then-encrypt system, it fails to disclose an encrypt-then-select system as claimed. In *Unger*, a select-then-encrypt system, when a critical packet is sensed in a clear stream, only the critical packets are encrypted and then multiplexed. However, according to the claim presented above, an encrypt-then-select system, without regard to critical packets, the clear stream is encrypted according to a first encryption method and encrypted according to a second method. Then, when the critical packet in the clear stream is sensed, the already-encrypted packets corresponding to the critical packet are selected for the multiplexer. Therefore, *Unger* does not anticipate independent claim 16, and the rejection should be withdrawn.

Because independent claim 16 is allowable over the cited references of record, dependent claim 17 (which depends from independent claim 16) is allowable as a matter of law for at least the reason that dependent claim 17 contains all the steps/features of independent claim 16.

Therefore, since dependent claim 17 is patentable over *Unger*, the rejection to claim 17 should be withdrawn and the claim allowed.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 16, dependent claim 17 recites further features and/or combinations of features, as are apparent by examination of the claim itself, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claim 17 is allowable.

III. Rejections Under 35 U.S.C. §103(a)

A. Claim 6

The Office Action rejects claim 6 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Unger, et al* (U.S. Publication No. 2003/0026423) in view of *Faulkner, et al* (U.S. Patent No. 5,144,669). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Applicants respectfully submit that *Unger* in view of *Faulkner* fails to disclose, teach, or suggest at least the above-emphasized claim features of independent claim 1 for similar reasons to those presented above. Further, Applicants respectfully submit that *Faulkner* fails to remedy these deficiencies. Since claim 6 incorporates the features of allowable claim 1, Applicants respectfully submit that claim 6 is allowable as a matter of law, and thus, respectfully request that the rejections to claim 6 be withdrawn.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 1, dependent claim 6 recites further features and/or combinations of features, as are apparent by examination of the claim itself, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claim 6 is allowable.

B. Claims 10-13

The Office Action rejects claims 10-13 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Unger, et al* (U.S. Publication No. 2003/0026423) in view of *Faulkner, et al* (U.S. Patent No. 5,144,669). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Applicants respectfully submit that Unger in view of Faulkner fails to disclose, teach, or suggest at least the above-emphasized claim features of independent claim 7 for similar reasons to those presented above. Further, Applicants respectfully submit that Faulkner fails to remedy these deficiencies. Since claims 10-13 incorporate the features of allowable claim 7, Applicants respectfully submit that claims 10-13 are allowable as a matter of law, and thus, respectfully request that the rejections to claims 10-13 be withdrawn.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 7, dependent claims 10-13 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claims 10-13 are allowable.

C. Claims 18-20

The Office Action rejects claims 18-20 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Unger, et al* (U.S. Publication No. 2003/0026423) in view of *Faulkner, et al* (U.S. Patent No. 5,144,669). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Applicants respectfully submit that Unger in view of Faulkner fails to disclose, teach, or suggest at least the above-emphasized claim features of independent claim 16 for similar reasons to those presented above. Further, Applicants respectfully submit that Faulkner fails to remedy these deficiencies. Since claims 18-20 incorporate the features of allowable claim 16, Applicants respectfully submit that claims 18-20 are allowable as a matter of law, and thus, respectfully request that the rejections to claims 18-20 be withdrawn.

Additionally and notwithstanding the foregoing reasons for allowability of independent claim 16, dependent claims 18-20 recite further features and/or combinations of features, as are apparent by examination of the claims themselves, that are patently distinct from the cited references of record. Hence, there are other reasons why dependent claims 18-20 are allowable.

IV. Miscellaneous Issues

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not

having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for at least the specific and particular reason that the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

CONCLUSION

For at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-20 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

It is believed that no extensions of time or fees for net addition of claims are required, beyond those which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to deposit account No. 20-0778.

Respectfully submitted,

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